

In the Claims:

Please cancel claims 1-22 and add new claims 23-42 as follows:

1-22. (Canceled)

23. A tank installation for a volatile liquid wherein there is an ullage space above the liquid in the tank in which said ullage space vapour collects, said tank installation having a fill-pipe for the introduction of volatile liquid into the tank, said fill-pipe having an exit which is normally within said liquid in the tank, and a vapour recovery system for use during filling of the tank to recover vapour displaced from said ullage space, said vapour recovery system comprising:

- restriction means within the fill-pipe defining a region of the fill-pipe of reduced cross-sectional area whereby in-flow of liquid along the fill-pipe into the tank results in a reduced static pressure in said region;
- a duct extending from said region of reduced cross-sectional area through the fill-pipe to open into said ullage space above the liquid in the tank; and
- a normally-closed valve assembly associated with the duct which valve assembly normally closes off communication through the duct between said region of reduced cross-sectional area and said ullage space, said valve being opened by in-flow of liquid along the fill-pipe into the tank, such that vapour in the ullage space is drawn from the ullage space along the duct by the reduced static pressure in the region of reduced cross-sectional area of the fill-pipe.

24. A vapour recovery system as claimed in claim 23, wherein the duct has a first portion and a second portion, said first portion extending from the region of reduced cross-sectional area of the fill-pipe upwardly away from the exit of the fill pipe, and said second portion extending from the first portion generally outwardly of the fill pipe to communicate with the ullage space of the tank.

25. A vapour recovery system as claimed in claim 24, wherein the normally-closed valve assembly is formed between the first and second portions of the duct.

26. A vapour recovery system as claimed in claim 24, wherein the first portion of the duct is defined by a tube mounted co-axially within the fill-pipe, the lower end of said tube being in the vicinity of the region of reduced cross-sectional area of the fill-pipe.

27. A vapour recovery system as claimed in claim 26, wherein the tube is mounted for sliding movement co-axially within the fill-pipe, the tube forming a part of the normally-closed valve assembly of the vapour recovery system.

28. A vapour recovery system as claimed in claim 27, wherein a spring applies a spring-force to the tube to urge the tube upwardly to a first position where the valve assembly is closed, and the tube is moved downwardly against the spring-force under the action of the in-flow of liquid, down the fill-pipe and into the tank.

29. A vapour recovery system as claimed in claim 28, wherein the tube is fitted with a spoiler, said spoiler lying in the liquid in-flow along the fill-pipe whereby the in-flow of liquid acts on the spoiler and so moves the tube downwardly against the spring-force.

30. A vapour recovery system as claimed in claim 29, wherein the spoiler projects into the liquid in-flow and is selected from the group consisting of a vane, a paddle and an annular cup surrounding the tube.

31. A vapour recovery system as claimed in claim 27, wherein the tube is mounted in a carrier which defines the second portion of the duct, the second portion of the duct being opened to the interior of the tube when the tube moves to open the valve assembly.

32. A vapour recovery system as claimed in claim 31, wherein the tube is provided with a head adjacent the carrier, said head being provided with a plurality of relatively small holes through which vapour passes on being drawn from the second portion of the duct to the first portion thereof, whereby the vapour is expanded and cools promoting the condensation thereof.

33. A vapour recovery system as claimed in claim 31, wherein a seal is provided between the tube and the carrier, said seal sealing the second portion of the duct from the interior of the tube when valve assembly is closed.

34. A vapour recovery system as claimed in claim 33, wherein said seal includes a first seal member arranged to seal off the upper end of the tube from the second portion of the duct when the valve assembly is closed.

35. A vapour recovery system as claimed in claim 34, wherein said seal includes a second seal member arranged to seal the exterior surface of the tube to the carrier, at least when the valve assembly is in its normally-closed setting.

36. A vapour recovery system as claimed in claim 31, wherein the carrier defines three second duct portions each extending generally outwardly from a central region of the carrier to the outer surface of the fill-pipe.

37. A vapour recovery system as claimed in claim 23, wherein the region of reduced cross-sectional area of the fill-pipe is defined by an insert, said insert being fitted internally of the fill-pipe.

38. A vapour recovery system as claimed in claim 24, wherein the region of reduced cross-sectional area of the fill-pipe is defined by an element fitted to an end of the first portion of the duct, said end being nearer the exit of the fill-pipe.

39. A vapour recovery system as claimed in claim 23, wherein the region of reduced cross-sectional area of the fill-pipe defines a venturi, wherein the speed of liquid in-flow is increased on passing through the venturi.

40. A vapour recovery system as claimed in claim 23, wherein the system is formed as a separate integral unit adapted for fitting to a tank fill-pipe.

41. A vapour recovery system as claimed in claim 40, wherein the separate integral unit has two ends each of which is provided with a respective connector, and the fill-pipe has an upper section connected to one connector of the integral unit, and a lower section connected to the other connector of the integral unit.

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42. In a tank installation for a volatile liquid and having a tank with an ullage space above liquid in the tank wherein vapour from the liquid collects, said tank installation having a fill-pipe for the introduction of volatile liquid into the tank, said fill-pipe having an exit which is normally within the liquid in the tank, and a vapour recovery system for use during filling of the tank to recover vapour displaced from said ullage space as the volume of liquid in the tank increases, there being a region of reduced cross-sectional area provided within the fill pipe, said method of recovering vapour comprising:

- generating a reduced static pressure within the region of reduced cross-sectional area by the in-flow of liquid along the fill-pipe;
- drawing the vapour along a duct entering the fill-pipe so as to communicate between the ullage space and the region of reduced cross-sectional area, by virtue of the reduced static pressure at said region; and
- normally closing-off said communication of the ullage space with the region of reduced cross-sectional area by a normally-closed valve assembly associated with the duct, which valve assembly is opened by the in-flow of liquid along the fill-pipe into the tank during the filling thereof, such that the reduced static pressure in the region of reduced cross-sectional area during filling of the tank draws vapour from the ullage space in the tank into the opened duct to be entrained in the in-flowing liquid.